**Quiz : Pandas Advance quiz (MCQ)**

1.Given a Pandas DataFrame df with a column 'date', how can you create a new column 'month' that contains the month value of each date?

1. df['month'] = df['date'].month
2. df['month'] = df['date'].apply(lambda x: x.month)
3. df['month'] = pd.to\_datetime(df['date']).month
4. df['month'] = df['date'].dt.month

2.How can you group a Pandas DataFrame df by the 'category' column and calculate the mean of the 'value' column for each group?

1. df.groupby('category').mean('value')
2. df.groupby('category')['value'].mean()
3. df.mean('category', 'value')
4. df.mean(groupby='category', column='value')

3. How can you create a scatter plot of two columns 'x' and 'y' in a Pandas DataFrame df?

1. df.plot(x='x', y='y', kind='scatter')
2. df.scatter(x='x', y='y')
3. df.plot.scatter(x='x', y='y')
4. df.plot(kind='scatter', x='x', y='y')

4. How can you read a CSV file 'data.csv' into a Pandas DataFrame and display the first 5 rows of data?

1. df = pd.read\_csv('data.csv', nrows=5)
2. df = pd.read\_csv('data.csv', skiprows=5)
3. df = pd.read\_csv('data.csv').head()
4. df = pd.read\_csv('data.csv').iloc[:5]

5.Which method in Pandas can be used to create a time delta object?

1. pd.to\_timedelta()
2. pd.timedelta()
3. pd.create\_timedelta()
4. pd.time\_delta()

6. How can you convert a column in a Pandas DataFrame to categorical data?

1. df.convert\_to\_categorical()
2. df.to\_categorical()
3. df.astype('category')
4. df.categorical()

7. Which method in Pandas can be used to create a scatter plot?

1. df.plot(kind='scatter')
2. df.plot(kind='line')
3. df.plot(kind='hist')
4. df.plot(kind='bar')

8. How can you drop a column from a Pandas DataFrame?

1. df.drop\_column('column\_name')
2. df.remove\_column('column\_name')
3. df.drop('column\_name', axis=1)
4. df.remove('column\_name', axis=1)